

Interactive comment on “Soil: the great connector of our lives now and beyond COVID-19” by Rosa M. Poch et al.

Anonymous Referee #2

Received and published: 28 July 2020

Reviewer comments on Poch et al “Soil: the great connector of our lives now and beyond COVID-19”

This article is written by members of the FAO Intergovernmental Technical Panel on Soil (ITPS). They draw attention to interruptions of food supply chains during the Covid-19 pandemic and state that this may promote greater reliance on local production of food. Many people would think this is a positive trend, especially for citizens in urban societies who have become increasingly separated from, and ignorant of, the sources of their food. However, these authors point to a possible downside of this trend, should it materialise. There is the risk that unsuitable soils will be used for intensive production and/or unsuitable management practices will be used, leading to degradation of soils and presumably negatively impact the long-term sustainability of food production. They

C1

then list five strategies to combat this negative possibility, namely: improved access to land, sound land use planning, sustainable soil management, enhanced research, and investments in education and extension.

As a contribution to a scientific journal, this paper can easily be criticised for at least two reasons: 1. It contains no new scientific information. 2. The five strategies proposed, and the statements about the crucial role of soils in food production, have been well known for many decades. And even as a “forum” style or “opinion” article it has little merit because it contains nothing new.

However, I think there is an alternative view that carries some weight – but it will be an editorial decision as to their relative strengths. Although the statements in the paper are well known to soil scientists and agricultural practitioners, they may be less familiar to city-dwelling policy makers with little knowledge of soil, agriculture or agriculture/environment interactions. There can be value in having fundamental truths restated for new audiences. And it can be useful to have them contained in a citable scientific publication. Although it is unlikely that such policy makers will read the paper themselves, it is possible it will be seen and cited by their advisers.

If the paper is to be published in SOIL I suggest three additions, or rather expansions, that would make it more valuable. It is currently written in the most general terms, with no specifics. Unless the authors can add some “flesh to the bones” I do not think it is particularly useful as a new publication. Of course, no one can disagree with its main thrusts regarding the value of soils and the importance of appropriate land use planning and management practices. But these points are set out in numerous reports from FAO, national and regional governments, NGOs, guidance materials for farmers and in textbooks.

1. It is unclear whether the authors are referring primarily to the situation in higher-income countries and/or large-scale farming or to small-scale farming in low-income countries; or perhaps to both? It would be helpful to be more specific and include

C2

comments on the issues relevant in these differing situations. Almost certainly the social and economic factors of importance will be different, though perhaps there are some generic points to be made. 2. The authors mention the common causes of soil degradation including “depletion of soil carbon and nutrients, increased erosion, over-fertilization, soil salinization, soil pollution. . .” It would be helpful to comment on which of these is most likely in different situations. Even give a few examples; of course, these will not be exhaustive but would give some substance to the article, as opposed to rather vague generalities. Examples from specific regions or situations could be useful as early warning of potential dangers elsewhere. 3. The strategies to combat soil degradation (and wider impacts on ecosystems) are all well known, have been stated and discussed for decades but sadly, in many situations, have been either ignored or even reversed. It would be helpful if the authors mentioned some key barriers to their implementation and give some fresh ideas on ways of overcoming them. Are there any good examples that could be pointers for addressing these issues elsewhere?

Interactive comment on SOIL Discuss., <https://doi.org/10.5194/soil-2020-38>, 2020.